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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,509	01/25/2002	Tatsuya Hirano	4304	4330

21553 7590 05/19/2004

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EXAMINER

MERCADO, JULIAN A

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 05/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/057,509

Applicant(s)

HIRANO ET AL.

Examiner

Julian Mercado

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1-25-02, 7-8-02
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the instant “see-through window portion is provided at each of opposing side surfaces of said battery casing” (as recited in claim 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The examiner notes that the Figures only show one side of the battery casing having the claimed see-through window.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

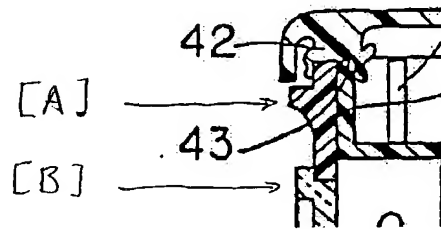
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 299 670 (hereinafter EP ‘670)

Regarding independent claim 1, EP ‘670 is relied upon to teach a battery having a thinner see-through window [6] portion provided on a sidewall of the battery casing. A reinforcing rib is

Art Unit: 1745

provided at said see-through window, such as the oval frame of the window [6] as shown in Figures 4 and 5. Figure 5 shows that the thickness of the battery casing [A] is equal to the thickness of the reinforcing rib [B]. (applies to dependent claim 4)



By this illustration it is considered that the reinforcing rib is a thicker portion of the see-through window. (applies to dependent claim 5) A plurality of reinforcing ribs such as partition walls [34, 35] and extending parallel to the height of the battery are provided at regular intervals for dividing the battery into a plurality of cells. (col. 9 line 25-52, applies to dependent claims 2 and 3) As to positioning the reinforcing rib "in alignment with said partition" (dependent claim 2), the ribs in EP '670 are considered to be in "parallel" alignment. The window is provided on one side surface of a rectangular-shaped battery. (applies to dependent claim 6)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over either JP 51-114641 (hereinafter JP '641) or JP 114235 (hereinafter JP '235), in view of Jensen (U.S. Pat. 4,076,906).

Regarding independent claim 1, JP '641 and JP '235 are relied upon to teach a storage battery having a thinner see-through window [9] and [2], respectively, portion provided on a sidewall of the battery casing. The window is provided on one side surface of what is considered a rectangular-shaped battery. (applies to dependent claim 6)

JP '641 and JP '235 do not explicitly teach a reinforcing rib provided at said see-through window. However, Jensen teaches a reinforcing rib [18] provided at a see-through window [14] of a storage battery. (Figure 3, col. 2 line 40-49) The reinforcing rib is present in plurality at points [24a, 22a, 20]. (Figure 10, applies to dependent claim 3) The skilled artisan would find obvious to provide a reinforcing rib at the see-through window of either JP '641 or JP '235 for reasons such as monitoring plate expansion as an additional indicator of remaining battery cell usage life. (see Jensen at col. 1 line 51-61, col. 2 line 57-68)

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over either EP '670 as applied to claims 1-6 above, or, either JP '641 or JP '235 in view of Jensen as applied to claims 1, 3 and 6 above.

The teachings of EP '670, JP '641, JP '235 and Jensen are discussed above.

Regarding dependent claim 7, as to the see-through window portion being provided at each of opposing side surfaces of said battery casing, it would have been obvious to one having ordinary skill in the art to provide plural see-through windows, since it has been held that mere

Art Unit: 1745

duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian Mercado whose telephone number is (571) 272-1289. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



jam



Patrick Ryan  
Supervisory Patent Examiner  
Technology Center